

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2005/000054

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A61K 31/4025, 31/155, 31/195, C07D207/26, 211/98, 401/12, 403/12, 215/00, A61P 19/00, 37/00, 21/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A61K, C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE, DK, FI, NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, STN-CAPLUS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9963929 A2 (ADVANCED MEDICINE, INC.), 16 December 1999 (16.12.1999), formula I --	1-16
A	WO 9912912 A1 (YUHAN CORPORATION), 18 March 1999 (18.03.1999), formula I --	1-16
A	WO 9316992 A1 (MERRELL DOW PHARMACEUTICALS INC.), 2 Sept 1993 (02.09.1993), formula I --	1-16
A	EP 0325397 A1 (YAMANOUCHI PHARMACEUTICAL CO. LTD.), 26 July 1989 (26.07.1989), formula I --	1-16

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

13 May 2005

Date of mailing of the international search report

17 -05- 2005

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>J. Am. Chem. Soc., Volume 117, 1995, James S. Nowick et al, "Molecular Scaffolds. 2. Intramolecular Hydrogen Bonding in 1,2-Diaminoethane Diureas", pages 89-99, see the whole document</p> <p style="text-align: center;">-- -----</p>	1-16

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				US	20040023290	A	05/02/2004
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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 14 - 16
because they relate to subject matter not required to be searched by this Authority, namely:

Claims 14-16 relate to a method of treatment of the human or animal body by surgery or by therapy, as well as diagnostic methods /Rule 39.1(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds.
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid; specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The present invention relates to novel diurea derivatives that block intracellular signal transduction and thereby inhibit the production of pro-inflammatory cytokines, especially interleukin-2 (IL-2) and/or induce apoptosis in activated T-cells. It further discloses such a compound for use as a medicament, the use of said compound for the manufacturing of a medicament for the treatment of immune disorders which benefit from inhibition of production of IL-2 and other pro-inflammatory cytokines and/or induction of apoptosis in activated T-cells, a pharmaceutical composition comprising said compound and a method of treatment comprising administration of a pharmaceutically effective amount of said compound.

A compound of the general formula I

